Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Improving Public Safety Communications in the 800 MHz Band	)	WT Docket 02-55
	)	
Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels	)	

REPLY COMMENTS OF THE CITY OF SAN DIEGO

The City of San Diego, hereby replies to the comments of others in the above-captioned proceeding. The City is hopeful that the Commission will reach a resolution that preserves public safety communications with minimal disruption in service and at no cost to the City.

Nextel operates a cellular CMRS system in the San Diego Region. This system creates significant harmful interference to public safety radio users within the metropolitan area. Sites in this system are often less that a mile apart and produce power levels that far exceed the level from public safety transmitters. Within the City, public safety users have identified at least ten (10) locations that have interference caused by Nextel transmitters. These sites produce two to three block areas of decreased or non-existent coverage. In some cases, users experience total loss of the ability to transmit or receive dispatch or communicate with other system users. To date, attempts to eliminate this harmful interference have resulted in very limited success.

If the City is required to relocate within the 800 MHz band, all costs incurred as a result of this move (e.g. retuning of networks: purchasing new or replacement equipment, engineering, installation, reprogramming of user equipment and all other costs associated with this effort) should be paid for from a source of funds that are specifically allocated and available for this effort. In these economic times, special attention must be given to developing a cost reimbursement program that eliminates the "bureaucracy" required to obtain the necessary funds.

The APCO/NEXTEL/Private Wireless Coalition "compromise plan." This plan proposes that Nextel receive 16 MHz of contiguous spectrum that will expand its service offerings and design and build broadband/cellular type networks and services. On the other hand, the plan states that public safety will receive 10 MHz of contiguous spectrum and that public safety must continue to build "high-site, high-power" networks. In San Diego, this precludes many current and future network architectures from being considered and implemented by public safety agencies such as Harmony iDen and VoIP. Unless the FCC intends to revisit the refarming issue of 800 MHz again in the near future, consideration should be given to allow the public safety community to have the same benefits of technology that B/ILT and Nextel enjoy.

Should the proposed "compromise plan" be implemented as is in San Diego, public safety would get only **3 MHz** (811-814 MHz) of spectrum, because of the treaty with Mexico and current channel allocations outlined in the treaty. It would be helpful to clarify what is meant by the statement that "existing proportionate" channel allocations will be made in border areas. Without further information, the City must assume that in the border areas, current frequency allocations will remain as is and that the City will be

exempt from the proposed "compromise plan." Should this not be the case, than it is requested that the FCC allocate proportionate spectrum – i.e. 10 MHz – to public safety users in the border areas, regardless of other users in the 800 MHz band.

The City of San Diego has licensed approximately 30, 25 kHz channels which equates to around 0.75M of spectrum. The County of San Diego has at least 70, 25 kHz channels (NPSPAC included) that equates to about 1.75M of spectrum. If the proposed "compromise plan" were implemented in San Diego, only 0.50M – or about 20, 25 kHz channels remain. This has not taken into account any current B/ILT licensees. In addition, current allocations do not provide for future expansion of these two networks. This is troubling because the City of San Diego is in the process of designing the replacement and/or upgrade of its current voice and data networks, and requires additional spectrum for its design. Each of these networks operate on 800 MHz channels and are an essential part of providing first responders and other emergency personnel the ability to communicate and protect the citizens of San Diego.

The spectrum being allocated – which is adjacent to the 700 MHz band and TV Channel 69 – may also provide harmful interference to public safety networks similar to that experienced from Nextel. The City suggests that historical complaints to the FCC should be reviewed and technical analyses performed to determine if there are current or potential interference problems from Channel 69. In the San Diego market, KSWB is operating a 4470 kW television station and it would be beneficial to review data showing the effects of this broadcast station on adjacent, non-TV 800 MHz users.

The proposed "compromise plan" states that public safety cannot build-out cellular-like architecture. It is puzzling that the proposal allows such limited use of the

spectrum by public safety agencies. The most crying need in the public safety community today is for high-speed mobile data.

The idea that public safety can wait to begin the build-out of high-speed mobile data until at least 2006 is unacceptable. The City is ready to move forward now, and there are probably many similarly situated public safety agencies in the United States that are ready to build high speed mobile data networks. However in San Diego, 700 MHz may still not be available and useable by 2006 because there isn't a treaty in place with Mexico for 700 MHz channels. If public safety is being forced to put all their "eggs" in the 700 MHz basket, there needs to be a definitive migration plan that demonstrates specifically that agreements have been reached with TV operators, and that treaties are in place with Mexico and Canada that allow the spectrum to be used in 2006. Further, implementation plans must be developed and funding plans established to insure immediate build-out in 2006. Assuming that all of this occurs on schedule, will the technology that will be used on this spectrum meet the high-speed mobile data needs of the public safety community? Recognizing that the FCC is not considering this issue right now, it is nevertheless imperative that the FCC consider the "Big Picture" – particularly since 800 MHz channels cannot be utilized to build cellular-like architecture.

There are site-by-site cases where public safety must put in place cellular-like architecture. In San Diego, a few examples include the Convention Center, numerous underground facilities, high-rise buildings, trolley stations and other areas that are not covered by high-site, high-power system architecture. That being said, the "compromise plan" states that as a public safety user, the City must hire an independent engineering firm who can demonstrate that the system proposed for installation in these type of

facilities will not cause interference to other incumbent 800 MHz licensees "with particular attention paid to a raising of the intermodulation floor across a broad spectrum that would interfere with analog equipment far from their base station." The City of San Diego would also have to pay for notifying incumbent licensees within the interfering contour of the proposed system and the potential of interference so they can file oppositions to the application with the FCC. This is clearly unacceptable. The City and the public safety community must be able to communicate and have its needs given the priority it deserves. Preservation of life must be a priority. Bi-Directional Amplifiers and similar devices should be excluded from any review and additional cost to public safety.

The following are Specific Comments/Corrections/Request for Clarification regarding the Compromise Plan:

The word "harmful" should be placed before the word "interference" in most cases throughout the document.

Under the Potential Benefits Section:

> Bullet 2 – *No public safety or private licensees are required to move out of the 800 MHz band.*

In the San Diego area, a different agreement must to be reached to allow sufficient spectrum for the remaining licensees. Public safety users near the United States border areas must have the same 10 MHz of spectrum being proposed nationwide.

> Bullet 3 – *A significant reduction in the potential for interference, and the establishment of a band plan that will facilitate future improvements in equipment to eliminate interference problems.*

Please see, comments above concerning TV Channel 69. Additionally, engineering studies may demonstrate that harmful interference to public safety users may result in other areas and not just in San Diego.

> Bullet 4 – *Public safety and private wireless licensees in the "interleaved" portion of the band will be able to remain on current frequency assignments.*

It is unclear how public safety and private wireless licensees in the "interleaved" band could remain there. This should be made clear in future versions of the "compromise plan" and should be addressed by the FCC in their review of this plan.

> Bullet 5 – *An equivalent block of 800 MHz spectrum will be available into which the National Public Safety Planning Advisory Committee portion of the band (821-824/866-869 MHz) can be moved, thus retaining the basic elements of existing regional plans.*

Please see comment above concerning NPSPAC channel allocation. Additionally, these channels are unavailable in the San Diego area. What provisions will be made for United States border areas? Again, future versions of the "compromise plan" should detail the implementation of the proposed re-allocation of the 800 MHz band in all areas and should not exclude a plan for the border areas.

Under Compromise Plan Section:

> Bullet 5 – *After realignment is completed, a licensee in the non-cellular block (below 816/861 MHz) may deploy a cellular-like system architecture only after (1) submitting to the Commission for approval an independent engineering demonstration that the re-engineered system will not cause interference to other incumbent 800 MHz licensees, with particular attention paid to a raising of the intermodulation floor across a broad spectrum that would interfere with analog equipment far from their base station, (2) completing the frequency coordination process with approval and certification by an FCC-certified frequency advisory committee, and (3) notifying incumbent licensees within the interfering contour of the applicant's proposed system of the potential interference so that they can analyze the proposal and file oppositions to the application at the FCC. The Commission will condition approval of any application for a cellular-*

like system architecture in the non-cellular band on the applicant being responsible for ongoing coordination with incumbent licensees and for immediate correcting any interference or terminating the offending operation;

It is unclear what is meant by "cellular-like system architecture." Does this preclude mobile data networks, VoIP type networks and/or iDen type networks? Careful consideration should be given to these technologies, mobile data network architecture and other future technologies that might employ "cellular-like system architecture." A clear definition needs to be provided to reviewers of the plan so they can better understand what is being proposed and be able to respond appropriately.

Bullet 6 – *The existing proportionate U.S. land mobile radio channel allocations in the U.S. – Mexico and U.S. – Canada Border Areas, respectfully, will be maintained in this realignment.*

It is unclear what is meant by "the existing proportionate U.S. land mobile radio channel allocations." How will this be implemented within the proposed channel re-allocation plan? Public safety users in all markets should get 10 MHz of spectrum as part of the re-allocation of the 800 MHz band.

CONCLUSION

The City of San Diego, like other cities across the nation has attempted to reduce public safety radio interference utilizing the "band-aid" approach. Now is the time to resolve commercial interference to public safety radio. This will require a comprehensive plan that meets the goals of public safety to eliminate commercial interference while maintaining sufficient spectrum for a reliable, life-saving communication system. If this plan requires public safety to retune or relocate its frequencies, public safety must be fully compensated for the costs, direct and indirect, to

modify its system. Public safety cannot be expected to cover the costs even if the providers are operating in full compliance with FCC rules and the terms of their licenses.

Respectfully submitted,

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